NC/QC/YD/2020-21/W3/F2-C1 Date: 05-01-2021

1. TEST REPORT ON CEMENT:

Sub: Testing of 53 Grade Cement Sample (IS 12269-1987).
{Project*: Improvements to Park at Major Sandeep Unnikrishnan road from Doddaballapura main road junction to dairy circle in Attur ward no 03 of Yelahanka Satellite town sub division).}
Ref.: Material testing/QC/18-19,
Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri. Ramesh Anand E, Bangalore.

PHYSICAL TESTS ON CEMENT

Grade * : 53,
Type * : O.P.C

TABLE 1.1:

SL No	Name of Test	Test Results	Requirements as per IS 8112-1989
1	Initial setting time	**154 min**	Shall not be less than 30 min
2	Final setting time	**265 min**	Shall not be more than 600 min
3	Fineness (by dry sieving on IS 90 micron sieve)	**1.86 %**	Not to exceed 10.0%
4	Soundness test(by Le-Chatelier's method)	**1.93 mm**	Shall not be more than 10 mm
5	Compressive strength a) 3 days (average of three results)	**28.65 N/Sq mm**	Shall not be less than 27 N/Sqmm

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site : Sandeep Unnikrishan Rd

NEWZEN CONSULTANT BANGALORE

NC/QC/YD/2020-21/W3/F2-PCC1

Date: 05-01-2021

1. TESTING OF COARSE AND FINE AGGREGATES:

Sub: Testing of Coarse and Fine aggregates to be used for bed concrete.
{Project*: Improvements to Park at Major Sandeep Unnikrishnan road from Doddaballapura main road junction to dairy circle in Attur ward no 03 of Yelahanka Satellite town sub division).}
Ref.: Material testing/QC/18-19,
Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri. Ramesh Anand E, Bangalore.

1. COARSE AGGRGATES TABLE - SIEVE ANALYSIS:

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2007) % Passing	
	40 mm Sample	Single size	Graded
40mm	100.00	85-100	90 – 100
20mm	63.75	0 -20	30- 70
10mm	29.15	0 -5	10- 35
4.75mm	3.55	------	0- 5

2. FINE AGGREGATES TABLE - SIEVE ANALYSIS

IS Sieve Size, mm	Percentage Passing	Specification as Per IS: 383-1970(Reaffirmed 2002) Percentage Passing			Remarks
		Zone-I	Zone-II	Zone -III	
04.75	96.40	90-100	90-100	90-100	The Sample Conforms to Grading **Zone-II**
02.36	81.25	60-95	75-100	85-100	
01.18	74.05	30-70	55-90	75-100	
600 mic	48.10	15-34	35-59	60-79	
300 mic	23.60	5-20	8-30	12-40	
150 mic	5.80	0-10	0-10	0-10	

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site : Sandeep Unnikrishan Rd

NEWZEN CONSULTANT Bangalore

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187

NC/QC/YD/2020-21/W3/F2-PCC2

Date: 12-01-2021

1. TESTING OF COARSE AND FINE AGGREGATES:

Sub: Testing of Coarse and Fine aggregates to be used for bed concrete.
{Project*: Improvements to Park at Major Sandeep Unnikrishnan road from Doddaballapura main road junction to dairy circle in Attur ward no 03 of Yelahanka Satellite town sub division).}

Ref.: Material testing/QC/18-19,

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri. Ramesh Anand E, Bangalore.

1. COARSE AGGRGATES TABLE - SIEVE ANALYSIS:

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2007) % Passing	
	40 mm Sample	Single size	Graded
40mm	100.00	85-100	90 – 100
20mm	67.90	0 -20	30- 70
10mm	28.45	0 -5	10- 35
4.75mm	3.95	------	0- 5

2. FINE AGGREGATES TABLE - SIEVE ANALYSIS

IS Sieve Size, mm	Percentage Passing	Specification as Per IS: 383-1970(Reaffirmed 2002) Percentage Passing			Remarks
		Zone-I	Zone-II	Zone -III	
04.75	96.85	90-100	90-100	90-100	The Sample Conforms to Grading **Zone-II**
02.36	83.05	60-95	75-100	85-100	
01.18	71.30	30-70	55-90	75-100	
600.mic	47.90	15-34	35-59	60-79	
300.mic	23.55	5-20	8-30	12-40	
150.mic	8.70	0-10	0-10	0-10	

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site : Sandeep Unnikrishan Rd

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NEWZEN CONSULTANT Bangalore

Date: 21-01-2021

NC/QC/YD/2020-21/W3/F2-CE1

1. TEST REPORT ON CEMENT:

Sub: Testing of 53 Grade Cement Sample (IS 12269-1987).
{Project*: Improvements to Park at Major Sandeep Unnikrishnan road from Doddaballapura main road junction to dairy circle in Attur ward no 03 of Yelahanka Satellite town sub division).}

Ref.: Material testing/QC/18-19,

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri. Ramesh Anand E, Bangalore.

PHYSICAL TESTS ON CEMENT

Grade * : 53,
Type * : O.P.C

TABLE 1.1:

SL No	Name of Test	Test Results	Requirements as per IS 8112-1989
1	Initial setting time	156 min	Shall not be less than 30 min
2	Final setting time	270 min	Shall not be more than 600 min
3	Fineness (by dry sieving on IS 90 micron sieve)	1.86 %	Not to exceed 10.0%
4	Soundness test(by Le-Chatelier's method)	1.92 mm	Shall not be more than 10 mm
5	Compressive strength a) 3 days (average of three results)	27.65 N/Sq mm	Shall not be less than 27 N/Sqmm

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site : Sandeep Unnikrishan Rd

NEWZEN CONSULTANT Bangalore

NC/QC/YD/2020-21/W3/F2-FA1

Date: 21-01-2021

1. TESTING OF FINE AGGREGATES :

Sub: Testing of Fine Aggregates.

{Project*: Improvements to Park at Major Sandeep Unnikrishnan road from Doddaballapura main road junction to dairy circle in Attur ward no 03 of Yelahanka Satellite town sub division).}

Ref.: Material testing/QC/18-19,

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri. Ramesh Anand E, Bangalore.

TABLE - 1.1 : SIEVE ANALYSIS

IS Sieve Size,mm	Percentage Passing	Specification as Per IS: 383-1970(Reaffirmed 2002) Percentage Passing			Remarks
		Zone-I	Zone-II	Zone -II	
04.75	97.60	90-100	90-100	90-100	The Sample Conforms to Grading Zone-II
02.36	81.55	60-95	75-100	85-100	
01.18	73.30	30-70	55-90	75-100	
600. mic	45.95	15.34	35-59	60-79	
300.mic	23.10	5-20	8-30	12-40	
150.mic	7.45	0-10	0-10	0-10	

TABLE 1.2 ;

Sl No	Test Conducted	Sample	Results	Requirements as Per IS. Specification IS :383-1970 (Reaffirmed 2002)
1	Bulking of Sand	001	15.86 %	-----
2	Silt Content	----	0.62 %	Not more than 8%
3	Specific Gravity	----	2.61	-------

The result of the materials tested meets the standards and hence can be used for the work.

Sample Collected Site : Sandeep Unnikrishan Rd

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NEW TECHNOLOGIES TO INNOVATE

Date: 17-02-2021

NC/QC/YD/2020-21/W3/F2-CB1

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07days Compressive Strength).
{Project*: Improvements to Park at Major Sandeep Unnikrishnan road from Doddaballapura main road junction to dairy circle in Attur ward no 03 of Yelahanka Satellite town sub division).}

Ref.: Material testing/QC/18-19,

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri. Ramesh Anand E, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M_{15}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	10-02-21	17-02-21	07	22500	300	13.33	**13.41**
	002	"	"	"	"	295	13.11	
	003	"	"	"	"	310	13.78	

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site : Sandeep Unnikrishan Rd

NEWZEN CONSULTANT * Bangalore *

Date: 10-03-2021

NC/QC/YD/2020-21/W3/F2-CB1a

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28days Compressive Strength).
{Project*: Improvements to Park at Major Sandeep Unnikrishnan road from Doddaballapura main road junction to dairy circle in Attur ward no 03 of Yelahanka Satellite town sub division).}

Ref.: Material testing/QC/18-19,

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri. Ramesh Anand E, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M_{15}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	10-02-21	10-03-21	28	22500	415	18.44	**18.37**
	002	"	"	"	"	420	18.67	
	003	"	"	"	"	405	18.00	

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site : Sandeep Unnikrishan Rd

NEWZEN CONSULTANT ★ Bangalore ★

NC/QC/YD/2020-21/W3/F2-CB2a

Date: 15-03-2021

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28days Compressive Strength).
{Project*: Improvements to Park at Major Sandeep Unnikrishnan road from Doddaballapura main road junction to dairy circle in Attur ward no 03 of Yelahanka Satellite town sub division).}
Ref.: Material testing/QC/18-19,
Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri. Ramesh Anand E, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M_{15}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	15-02-21	15-03-21	28	22500	410	18.22	**18.52**
	002	"	"	"	"	425	18.89	
	003	"	"	"	"	415	18.44	

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site : Sandeep Unnikrishan Rd

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